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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/137,198	08/20/1998	NORMAN J. BEAMISH	ROKWELL.039A	2615

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EXAMINER

KUMAR, PANKAJ

ART UNIT	PAPER NUMBER
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2631

DATE MAILED: 02/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/137,198

Applicant(s)

BEAMISH ET AL.

Examiner

Pankaj Kumar

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-7 is/are allowed.
- 6) ☒ Claim(s) 14-19 is/are rejected.
- 7) ☒ Claim(s) 8, 9 and 11-13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☒ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Arguments***

1. Applicant's arguments with respect to claims 1-19 have been considered but are moot in view of the new ground(s) of rejection.

***Response to Amendment***

***Claim Objections***

2. Claims 8, 9, 11-13 are objected to because of the following informalities: In the second to the last line of claim 8, "then" should be 'than'. Claims 9, 11-13 are objected to since they depend on objected claim 8. Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 14-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al. USPN 5,887,020 in view of Beard USPN 6,434,187
5. As per claim 14, Smith teaches a cordless telephone dual mode wireless transceiver comprising:

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6. a direct sequence spread spectrum transmitter means for modulating (Smith fig. 2: 111) an input signal (Smith fig. 2: 101) as a direct sequence spread spectrum signal (Smith fig. 2: output of 111);

7. a frequency hopping spread spectrum transmitter means for modulating the input signal as a frequency hopping spread spectrum signal

a. (Smith does not teach FHSS. Smith teaches narrowband. Frequency hopping is just narrow band which is hopping.

b. It is common knowledge to change signal modes.

c. It would have been obvious to one skilled in the art at the time of the invention to modify Smith to teach FHSS signal mode instead of narrowband signal mode. One would be motivated to do so since FHSS is not as easy to track as narrowband.);

8. a mode selection means ~~switch~~ coupled to said direct sequence spread spectrum transmitter means and to said frequency hopping spread spectrum transmitter means (Smith fig. 2: 104, 101) for detecting whether the input signal is voice or data and when the input is voice (Smith paragraph 19: “ ... Using transmitter-information processing device 101, input information may be filtered, analog-to-digital (A/D) converted if required, as determined by the mode switch control, and applied to either a narrowband or spread spectrum modulation process. ... ”), selecting ~~either~~ said direct sequence spread spectrum transmitter means to transmit said input signal as a direct sequence spread spectrum signal with a first transmission rate ~~or~~ and when the input is data, selecting said frequency hopping spread spectrum transmitter means to transmit said input signal as a frequency hopping spread spectrum signal with a transmission rate greater than said first transmission rate

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9- (Smith, in fig. 2 elements 101, 104, 103, paragraph 19, teaches, based on the type of data, the mode switch controller will handle the data differently and will also select between narrowband and spread spectrum based.

~~10-~~ Smith does not teach different transmission rates.

~~11-~~ Beard does teach this – paragraph 7: “FHSS typically enables high data rates to be achieved without requiring the high-speed logic that an equivalent DSSS system would require.”

~~12-~~ It would have been obvious to one skilled in the art at the time of the invention to modify Smith to include FHSS data rate being faster than DSSS data rate as taught in Beard. One would be motivated to do so for efficiency.);

~~13-~~ and a receiver capable of receiving and demodulating both direct sequence spread spectrum modulated signals and frequency hopping spread spectrum modulated signals (Smith fig. 3).

~~14-~~ As a reminder, during the interview on 11/17/2003, it was discussed that there are references that teach DSSS and other references that teach FHSS and it would have been obvious to one skilled in the art at the time of the invention to combine these two sets of references with a switch.

15. As per claim 15, Smith teaches the cordless telephone dual mode wireless of claim 14, wherein said direct sequence spread spectrum transmitter portion includes a spreading code generator (Smith fig. 2: 107).

16. As per claim 16, Smith teaches the cordless telephone dual mode wireless of claim 15, further including a frequency generator (Smith fig. 2: 105) and wherein said frequency hopping

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spread spectrum transmitter means further includes a hopping sequence generator selectively coupled to said frequency generator (Smith fig. 2: 105 is coupled to 113).

17. As per claim 17, Smith teaches the cordless telephone dual mode wireless of claim 15, further including a spreading code mixer for mixing the output of said spreading code generator and the input signal (Smith fig. 2: 111 will mix the output of 107 with input via 104).

18. As per claim 18, Smith teaches the cordless telephone dual mode wireless of claim 17, further including a modulating mixer coupled to receive the output of said spreading code mixer and said frequency generator. (Smith paragraph 13: "The spread-spectrum modulator 111 modulates the carrier with the processed information signal and the chip-code signal as a spread-spectrum signal"; fig. 2: 111 receives from 105 and 101 via 104)

19. As per claim 19, Smith teaches the cordless telephone dual mode wireless of claim 14, wherein said receiver portion selectively receives a spreading code from said direct sequence spread spectrum transmitter portion (Smith fig. 3: selectively receives, using a filter and a despreader, data is spread using codes in the transmitter of fig. 2 and thus fig. 3 receives the spreading code since spread data received has been spread using code).

***Allowable Subject Matter***

20. Claim 1 is allowed.

21. Claims 2-7 are allowed since they depend on allowed claim 1.

22. Claim 8 is objected to but would be allowed for the same reason as claim 1 if claim 8 is amended to overcome the objection cited in this action.

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23. Claims 9, 11, 12 and 13 are objected to but would be allowed since they depend on claim 8.

24. The following is a statement of reasons for the indication of allowable subject matter:

The art of record does not suggest the respective claim combinations together and nor would the respective claim combinations be obvious with: the mode selection circuit configured to detect when the transceiver is transmitting a voice transmission and in response thereto to selectively activate said direct sequence spread spectrum portion and deactivate said frequency hopping spread spectrum portion and the mode selection circuit configured to detect when the transceiver is transmitting a data transmission and in response thereto to selectively activate said frequency hopping spread spectrum portion and deactivate said direct sequence spread spectrum portion

***Conclusion***


The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: USPN 5061385, WO 96/38925

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pankaj Kumar whose telephone number is (703) 305-0194. The examiner can normally be reached on Mon, Tues, Wed and Thurs after 8AM to after 6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad H. Ghayour can be reached on (703) 306-3034. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

PK

  
TEMESGHEN GHEBRETINSAE  
PRIMARY EXAMINER